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C O N F I D E N T I A L SECTION 01 OF 02 BERLIN 001319

SIPDIS

STATE FOR ISN/MDSP DICK BUENNEKE

NSC FOR PETER MARQUEZ

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TAGS: [ETTC](#) [PGOV](#) [PINR](#) [MCAP](#) [PREL](#) [TSPA](#) [FR](#) [UK](#) [GM](#)

SUBJECT: GERMAN SPACE AGENCY FLOATS A MERGED GPS AND GALILEO UNDER NATO

REF: A. BERLIN 1207

[B.](#) BRUSSELS 1153

[C.](#) BERLIN 655

[D.](#) BERLIN 430

[E.](#) BERLIN 429

[F.](#) 08 BERLIN 899

[G.](#) 08 BERLIN 897

[H.](#) 08 BERLIN 264

[I.](#) 08 BERLIN 243

Classified By: Global Affairs Unit Chief Don L. Brown for reasons 1.4 (b) and (d).

[11.](#) (C) SUMMARY AND COMMENT: A senior German Space Agency (DLR) official informally floated the idea of aligning the security aspects of the US Global Positioning System (GPS) and the European Galileo Global Navigation Satellite Systems (GNSS) under the framework of NATO within the next ten years.

He argued that putting GPS and Galileo under one roof would significantly increase their resistance to denial of service measures, add system redundancy, and create separate avenues for countermeasures. He suggested that the EU could be supportive and, given that Galileo remains in the design stage, there may be a small window of opportunity to incorporate USG input into the Galileo design. This is the second time that he has proposed a joint GPS/Galileo partnership (ref F). END SUMMARY AND COMMENT

[12.](#) (C) On September 23, ISN/MDSP Deputy Director for Space Policy and EconOff met with DLR's Program Director for Space, Dr. Hubert Reile and Dr. Andreas Eckardt, DLR Head of Optical Sensors and Electronics, to discuss opportunities for US/German cooperation on satellite programs. The meeting was organized by officials from the Friedrichshafen branch of EADS Astrium and DLR. DLR's two primary objectives for this meeting were to float the idea of combining the military aspects of the GPS and Galileo Position, Navigation and Timing (PNT) systems under the framework of NATO and to solicit USG support for cooperation on Germany's planned High Resolution Optical System (Please see ref A).

60 SATELLITES ARE BETTER THAN 30

[13.](#) (C) Reile advocated joining GPS and Galileo as a way to

counter the threat posed by increasingly available and sophisticated GNSS denial of service mechanisms. Noting that the simplest countermeasure is redundancy, he indicated that 60 satellites are better than 30. He rationalized that in the next 3-5 years, civilian users will incorporate all available GNSS data sources for the best possible service and that the US and EU militaries should have the same advantage.

¶4. (C) He also observed that a GPS/Galileo merger would offer the robustness of two anti-jamming approaches. He said that where GPS's anti-jamming approach in Block III is to concentrate signal strength on selected areas (to drown out interference), Galileo will use a frequency hopping mechanism. Reile emphasized that by combining these two approaches, the threat from bad actors would be considerably diminished.

ACT NOW, BEFORE IT'S TOO LATE!

¶5. (C) Reile pointed out that, while construction of 26 of the 30 Galileo satellites is not scheduled to begin until next year, there is still time for the USG to influence the Galileo design. When asked about the probability of getting the rest of the EU on board with a hypothetical GPS/Galileo merger, Reile said this had already been discussed informally within EU circles and that major EU satellite players, including France, are keen about the idea. He said about half of the EU would go along with the major players and that

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he has heard encouraging remarks from some of the traditionally less-supportive EU members such as the UK.

COMMENT

¶6. (C) Although this informal meeting covered wide ground on prospects for US-German collaboration, it was clear that DLR's top priority was in planting the seed of a Galileo/GPS merger. DLR believes the EU would be agreeable to placing the security aspects of Galileo under NATO control if the USG would do the same with GPS. DLR is hopeful that the USG will engage in this discussion and likely used this meeting as a vehicle to invite a response.
Murphy